

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of allotting pattern units of an overall coding pattern in an information management system, in which each pattern unit has a unique pattern address, said method comprising:

receiving an allotment request for a number of pattern units;

searching an electronic representation of said overall coding pattern to locate said number of pattern units available for allotting;

setting a state indicator of said number of pattern units in said representation to indicate an allotted state; [[and]]

outputting an indication of the pattern addresses of said number of pattern units;

and

selectively changing, from the allotted state to a released state, the state indicator of at least one pattern unit whose state indicator is set to the allotted state.

2. (Original) The method of claim 1, wherein the pattern units are defined in an ordered sequence by the pattern addresses, said searching comprising:

locating said number of pattern units as consecutive pattern units in said ordered sequence.

3. (Original) The method of claim 1, wherein said pattern units are divided into ordered groups, said searching comprising:

locating said number of pattern units within one of said groups.

4. (Cancelled).

5. (Currently Amended) The method of claim [[4]] 1, wherein said changing is effected based on an elapsed time since the state indicator was set to the allotted state.

6. (Currently Amended) The method of claim [[4]] 1, wherein said changing is effected based on receipt of a request for release.

7. (Currently Amended) The method of claim [[4]] 1, wherein said released state indicates that the at least one pattern unit is available for allotting.

8. (Currently Amended) The method of claim 7, wherein said released state indicates that the at least one pattern unit is available for allotting a predetermined time after the state indicator was set to the released state.

9. (Currently Amended) The method of claim [[4]] 1, wherein said searching is at least partly based on the state indicator.

10. (Original) The method of claim 9, wherein said searching comprises a re-use step

in which searching is effected among pattern units with the state indicator in the released state.

11. (Original) The method of claim 10, wherein said searching comprises, if the re-use step is unsuccessful:

locating said number of pattern units among previously non-allotted pattern units in said representation.

12. (Original) The method of claim 1, further comprising:

selectively changing the state indicator of at least one pattern unit from the allotted state to a locked state.

13. (Original) The method of claim 12, wherein said locked state indicates that information relating to the pattern unit is to be blocked from being transferred in said information management system.

14. (Original) The method of claim 12, further comprising:

selectively changing the state indicator of at least one pattern unit from the locked state to the allotted state.

15. (Original) The method of claim 12, further comprising:

selectively changing the state indicator of at least one pattern unit from the locked state to a released state.

16. (Original) The method of claim 15, wherein said changing is effected based on an elapsed time since the state indicator was set to the locked state.

17. (Currently Amended) The method of claim [[4]] 1, wherein said changing is effected based on receipt of a request for state change indicating the pattern address of each pattern unit to be affected.

18. (Original) The method of claim 1, wherein said searching is effected in a data structure containing at least part of the electronic representation, said data structure comprising a set of records, each record comprising a pattern address field and a state indicator field.

19. (Original) The method of claim 18, wherein each record represents one allotment request.

20. (Original) The method of claim 18, wherein each record represents pattern units that have been allotted to a set of pages of an electronic document.

21. (Original) The method of claim 18, wherein each record comprises a field that indicates the number of allotted pattern units.

22. (Original) The method of claim 18, wherein each record represents one pattern unit.

23. (Original) The method of claim 18, wherein said setting of the state indicator comprises deleting a record from said data structure.

24. (Currently Amended) The method of claim 18, ~~further comprising: selectively changing the state indicator of at least one pattern unit from the allotted state to a released state,~~ wherein the electronic representation comprises an ordering of the pattern units as defined by the pattern addresses, said method further comprising:

locating, in said data structure, records that have both a state indicator field in the released state and adjacent pattern addresses in said ordering[[],]; and

merging [[such]] the located records.

25. (Original) The method of claim 1, further comprising:

deriving at least one destination indicator from said allotment request, and storing the destination indicator in association with the pattern addresses of said number of pattern units.

26. (Currently Amended) An arrangement for allotting pattern units of an overall coding pattern in an information management system, said arrangement comprising:

a storage unit which contains an electronic representation of the overall coding pattern;

a first interface; and

a processing unit which comprises:

means for receiving, on the first interface, an allotment request for a number of pattern units;

means for searching said representation in the storage to locate said number of pattern units available for allotting;

means for setting a state indicator of said number of pattern units in said representation to indicate an allotted state; [[and]]

means for outputting, on the first interface, an indication of the pattern addresses of said number of pattern units; and

means for selectively changing, from the allotted state to a released state, the state indicator of at least one pattern unit whose state indicator is set to the allotted state.

27. (Original) The arrangement of claim 26, wherein said system comprises a generation tool which coordinates the generation of a product with a coding layer that is based on said number of pattern units, said first interface being adapted for communication with said generation tool.

28. (Original) The arrangement of claim 26, further comprising a second interface, wherein the processing unit comprises means for receiving, on the second interface, a request for state change indicating the pattern address of each pattern unit to be affected.

29. (Original) The arrangement of claim 28, wherein data is selectively transferred in

said system to a plurality of destination units, said second interface being adapted for communication with the destination units.

30. (Currently Amended) The arrangement of claim 26, wherein the processing unit further ~~comprises~~ comprises:

means for receiving, on the first interface, at least one data identifier which is associated with the allotment request; and

means for storing the data identifier in said representation in association with said number of pattern units.

31. (Currently Amended) The arrangement of claim 30 further comprising a second interface, wherein the processing unit further ~~comprises~~ comprises:

means for receiving, on the second interface, a data identifier request indicating at least one pattern address;

means for identifying a data identifier in said representation based on the pattern address; and

means for outputting, on the second interface, the thus-identified data identifier.

32. (Original) The arrangement of claim 26, wherein the processing unit further comprises means for selectively changing the state indicator of at least one pattern unit from the allotted state to a locked state.

33. (Original) The arrangement of claim 32, wherein the locked state indicates that

information relating to the pattern unit is to be blocked from being transferred in said system.

34. (Original) The arrangement of claim 32, wherein the processing unit further comprises means for selectively changing the state indicator of at least one pattern unit from the locked state to the allotted state.

35. (Cancelled).

36. (Currently Amended) The arrangement of claim 26, wherein the processing unit further ~~comprises~~ comprises:

means for receiving, on the first interface, at least one destination indicator; and

means for storing the destination indicator in association with the pattern addresses of said number of pattern units.

37. (Currently Amended) The arrangement of claim 36, further comprising a third interface, wherein the processing unit ~~comprises~~ comprises:

means for receiving, on the third interface, a destination indicator request indicating at least one pattern address;

means for identifying a destination indicator in said representation based upon the pattern address; and

means for outputting, on the third interface, the thus-identified destination indicator.

38. (Original) The arrangement of claim 37, wherein said system comprises a flow controller which directs data associated with at least one of said pattern units to one of a plurality of destination units, said third interface being adapted for communication with said flow controller.

39. (Currently Amended) An information management system, comprising:

a generation tool which coordinates the generation of a product with a coding layer that is based on a number of pattern units;

a flow controller which directs data recorded by an electronic pen on the product to one of a plurality of destination units, said data being associated with at least one of said number of pattern units; ~~and the arrangement of claim 26 which communicates at least~~

a storage unit which contains an electronic representation of an overall coding pattern;

a first interface; and

a processing unit comprising:

means for receiving, on the first interface, an allotment request for the number of pattern units;

means for searching said representation in the storage to locate said number of pattern units available for allotting;

means for setting a state indicator of said number of pattern units in said representation to indicate an allotted state;

means for outputting, on the first interface, an indication of the pattern addresses of said number of pattern units; and

means for selectively changing, from the allotted state to a released state, the state indicator of at least one pattern unit whose state indicator is set to an allotted state,

wherein the processing unit communicates at least with the generation tool.

40. (Currently Amended) A method in an information management system which controls the flow of data from an electronic pen to one of a plurality of destination units, said data being associated with a position-coded product, said method comprising:

allotting at least one pattern unit of an overall coding pattern for the generation of said position-coded product;

selectively setting a state indicator for each allotted pattern unit to indicate one of a plurality of states; and

controlling the flow of data, from the electronic pen to said one of the plurality of destination units, in said system at least partly based on the state indicator.

41. (Original) The method of claim 40, wherein said state indicator is indicative of an allotted state, to signify that any data associated with the allotted pattern unit is enabled for transmission to said one destination unit.

42. (Original) The method of claim 41, wherein said state indicator indicative of an allotted state is associated with a destination indicator, said destination indicator being

indicative of a communication address of said one destination unit.

43. (Original) The method of claim 40, comprising irreversibly blocking any data associated with the allotted pattern unit from transmission to said one destination unit by setting said state indicator to indicate a released state.

44. (Original) The method of claim 43, wherein the allotted pattern unit, in said released state, is made available for further allotting.

45. (Original) The method of claim 40, comprising reversibly blocking any data associated with the allotted pattern unit from transmission to said one destination unit by setting said state indicator to indicate a locked state.

46. (Original) The method of claim 12, wherein said changing is effected based on receipt of a request for state change indicating the pattern address of each pattern unit to be affected.

47. (Original) The method of claim 14, wherein said changing is effected based on receipt of a request for state change indicating the pattern address of each pattern unit to be affected.

48. (Original) The method of claim 15, wherein said changing is effected based on

receipt of a request for state change indicating the pattern address of each pattern unit to be affected.